ABSTRACT

The development of computer networks now, began to shift from development wired network to a wireless network (wireless). This was the demands of the need access to information and data quickly and can be accessed anytime and anywhere. One model of the development of wireless networks is the type of ad hoc networks. One example of an ad hoc network are experiencing rapid growth now is the Mobile Ad Hoc Network (MANET).

This thesis presents the simulation result and performance analysis of reactive routing protocol Ad-hoc On Demand Vector (AODV) and Dynamic Routing Protocol (DSR). This analysis is based on average throughput, delay, jitter, packet delivery ratio, packet loss, and routing overhead by varying the number nodes and number connection. The simulation is performed using Network Simulation-2.

The results show that DSR outperforms parameters delay, jitter, packet delivery ratio, packet loss, and routing overhead than AODV for all scenarios with varying of the number of nodes and the number of connections. AODV outperforms for parameters throughput of all scenario varying number nodes and number connections.

Keyword: *MANET, AODV, DSR, NS-2, Reactive Routing Protocol.*